

## Minimum staffing requirements for the performance of GI endoscopy

*This is one of a series of statements discussing the use of GI endoscopy in common clinical situations. The Standards of Practice Committee of the American Society for Gastrointestinal Endoscopy (ASGE) prepared this text. In preparing this guideline, a search of the medical literature was performed by using PubMed. Additional references were obtained from the bibliographies of the identified articles and from recommendations of expert consultants. Guidelines for appropriate use of endoscopy are based on a critical review of the available data and expert consensus at the time the guidelines are drafted. Further controlled clinical studies may be needed to clarify aspects of this guideline. This guideline may be revised as necessary to account for changes in technology, new data, or other aspects of clinical practice.*

*This guideline is intended to be an educational device to provide information that may assist endoscopists in providing care to patients. This guideline is not a rule and should not be construed as establishing a legal standard of care or as encouraging, advocating, requiring, or discouraging any particular treatment. Clinical decisions in any particular case involve a complex analysis of the patient's condition and available courses of action. Therefore, clinical considerations may lead an endoscopist to take a course of action that varies from these guidelines.*

Staffing requirements for the performance of GI endoscopy should be based on what is needed to ensure safe and proficient performance of the individual procedure. Currently, staffing may vary as determined by local practice, regulatory (federal, state, and local) and accreditation requirements, patient characteristics, and the type of endoscopic procedure being performed. The Joint Commission and the Accreditation Association for Ambulatory Health Care do not define the specific qualifications or number of staff required. Rather, they generalize that the staff be adequate in number with appropriate training and supervision.<sup>1,2</sup> The level of education and training of the staff can vary, including registered nurses (RNs), licensed practical nurses (LPNs), and unlicensed assistive personnel (UAP). Some UAP undergo additional training in the GI endoscopy unit and are often referred to as GI assistants or GI technicians. While the physician is performing

endoscopic procedures, the endoscopy suite staff has 3 major responsibilities that include, but are not limited to, patient monitoring, documentation, and technical assistance.<sup>3</sup> Technical assistance includes such activities as application of abdominal pressure, manipulation of endoscopic accessory devices (eg, forceps, snares, balloons, bougies, cautery devices), manipulation of endoscopes (eg, maintaining endoscope position while the endoscopist performs complex tasks), and cleaning and preparation of endoscopes. Accreditation organizations recommend that endoscopy unit staff receive training appropriate to their responsibilities and document maintenance of competency periodically (eg, annually). Objective evidence pertaining to the relationship between endoscopy unit staffing levels and patient outcomes is lacking. Therefore, recommendations are based primarily on expert opinion and clinical experience.

### ENDOSCOPY WITHOUT SEDATION

The majority of GI endoscopic procedures performed in the United States are performed with sedation. However, sigmoidoscopy and transnasal endoscopy are often performed without sedation. Sometimes colonoscopy is also performed without sedation. In this setting, 1 endoscopy staff member is required to assist with various technical aspects, such as obtaining biopsy specimens. An appropriately trained UAP, LPN, or RN may perform these tasks.

### ENDOSCOPIST-DIRECTED SEDATION

For those patients receiving moderate sedation for endoscopic procedures, the physician must perform a preprocedural assessment to determine the suitability of the patient for sedation and then formulate a sedation plan. Under the supervision of the physician, the RN prepares and administers sedatives while monitoring the patient's vital signs, comfort, and clinical status to detect any intra-procedural complications.<sup>4</sup> Once the patient's level of sedation and vital signs are stable, the RN may perform minor, interruptible tasks (eg, biopsy or polypectomy).<sup>5-7</sup> In patients who require more intensive or prolonged endoscopic interventions (eg, difficult polypectomy, EUS/FNA, ERCP), a second assistant, who may be a UAP, LPN, or another RN, should assist in the procedure to allow the RN administering moderate sedation to remain focused on patient monitoring rather than technical assistance.

In some endoscopy units, deep sedation is performed by the administration of propofol by an RN under the direction of the physician endoscopists.<sup>7</sup> However, this practice may be restricted by local or state regulations. The responsibilities of this primary RN should be limited to patient monitoring and administration of sedation under the guidance of the physician.<sup>5,7</sup> A second assistant is required for technical assistance during the procedure in this setting, who may be a UAP, LPN, or RN.

## ENDOSCOPY WITH AN ANESTHESIA PROVIDER

In patients undergoing endoscopic procedures for which an anesthesiologist or certified RN anesthetist is providing sedation, the anesthesia provider has the responsibility of monitoring the patient's vital signs, comfort, and clinical status. In this situation, one endoscopy staff member is required to assist the endoscopist with the technical portion of the procedure. This person may be a UAP, LPN, or RN. However, the presence of an RN is not mandatory in this setting.

## RECOMMENDATIONS

1. It is recommended that unsedated endoscopic procedures be staffed with a minimum of a single assistant, who may be a UAP, LPN, or RN.
2. It is recommended that for endoscopy with moderate sedation, a single RN may administer sedation under physician supervision and assist with the technical portion of the endoscopic procedure, provided that these tasks be interruptible.
3. It is recommended that complex endoscopic procedures (eg, difficult polypectomy, ERCP, EUS/FNA) be staffed with a second endoscopy assistant. This individual may be a UAP, LPN, or RN.
4. It is recommended that if an RN administers deep sedation under physician supervision, then staffing should include a second endoscopy assistant. This individual may be a UAP, LPN, or RN.
5. In the setting of sedation administered by an anesthesia provider (ie, anesthesiologist or certified RN anesthe-

tist), it is recommended that staffing include an individual dedicated to endoscopic technical assistance. This individual may be a UAP, LPN, or RN.

## REFERENCES

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